#### TOXIC ALGAE - FREQUENTLY ASKED QUESTIONS

## **Updated December 2017**

# Q: Isn't this a common problem? Don't lakes have algae here every year? Why is this such a big deal?

While algae blooms are common, especially during the summer, toxic algae blooms are much less common. There are two types of toxin that can occur at levels that might cause health concerns.

#### Q: What types of toxins are there?

Anatoxin-a is a potent and fast-acting neurotoxin. At unsafe levels it can cause serious health problems and even death to both people and pets. The advisory level of Anatoxin-a, according to the WA state health department is 1microgram per liter.

Microcystin is a toxin that accumulates in the liver over time. At high concentrations it can cause serious health issues to both people and pets. The advisory level of microcystin in drinking water according to the Washington state health department is 6 micrograms per liter.

The most common toxins we see are anatoxin-a, and microcystin. There are other less common toxins which can also be nervous system toxins, liver toxins, or skin irritants. Additional technical information is available at <a href="http://bit.ly/2Alt0vZ">http://bit.ly/2Alt0vZ</a>

#### Q: How long do algae blooms last?

A: We don't know. In Thurston County algae blooms have lasted from one week to nine weeks. In order to declare that a lake is safe again, the State Department of Health recommends that there be two consecutive clean samples at least a week apart. As long as the algae is producing the toxin at levels of public health concern, we are always at least two weeks out from declaring the lake is safe again.

#### Q: Can't we treat the water somehow?

A: There are <u>NO EXISTING FILTRATION SYSTEMS</u> marketed for home use that reliably filter Anatoxin-a. There is one system that may be able to filter Mycrocystin. Go to the <u>NSF Blue Green Algae Toxins</u> site and click on the link to the <u>NSF Protocol P477 Drinking Water Treatment Units</u> page.

Methods that DO NOT WORK include UV light, boiling or disinfection. These do not remove either toxin, and may, in fact, release more of it. Because the toxin is released into the water from the algae, and the water circulates, we must proceed as though all of the water may be contaminated. For this reason, the location of your intake, and the presence or absence of a filtration system does not impact our recommendations.

Q: Is there a chance that recreational use of the lake could contaminate other lakes (via boats or shoes).

A: We can't be 100% certain, but we believe not. The types of algae that product anatoxin –a and microcystin occur naturally in the lake. They grow and produce toxin with environmental conditions are right.

#### Q: Why can't we shower, wash dishes, or do laundry? Is this really a risk?

A: We know that these toxins are dangerous. The primary concern with showering, dishes, and laundry, is that water might accidentally be ingested. While less is known about the potential impact of skin contact with the toxin, we known that it is a concern and are advising a "better safe than sorry" approach.

#### Q: What about eating fish from the lake, or eating vegetables watered with lake water?

A: We have no specific information about whether Anatoxin-a accumulates in fish tissue or in vegetables. Fish do accumulate some toxins, and again, we recommend a "better safe than sorry" approach due to the fact that both toxins can cause serious health issues.

## Q: Do you know of any people or pets that have been affected?

A: We do not know of any pets or people affected by the current toxic algae bloom. If you see a dead, or ill, animal in or around the lake, please notify us at 360-867-2626. Our hope is that with an abundance of caution, there will continue to be no reports of sickness or death as a result of the presence of either toxin.

#### Q: Some people have wells. Could those wells be contaminated?

A: Yes, wells near a lake could be contaminated. It is not unusual for shallow wells, in particular, to have connectivity to lake water. We recommend an abundance of caution in this case, because of the potential health impacts of this particular toxin.

#### Q: What is causing the problem?

A: Toxic algae blooms are being studied globally, however at this time, we don't know what triggers toxin production.

## Q: How often is the water tested? Is it normally tested?

A: Tests for toxic algae are done immediately after a bloom is reported to us by a resident. We will test the water each week until the algae bloom subsides and toxin levels drop to safe levels, You can report algae blooms at 360-867-2626.

# A: Information about getting private samples tested, and the associated costs is available on the <u>Summit Lake Toxic Algae web page</u>

#### Q: What can we do to prevent problems in the future?

A: Residents living on some lakes have formed Lake Management Districts to look at community policies that might help prevent algae blooms and that can help streamline response in the community when a toxic bloom occurs. Thurston County Public Health is dedicated to supporting the community in their future planning efforts.